

ABSTRACT OF THE DISCLOSURE

After the OFDM signal for MMAC is received by a receiving unit , an FFT processing unit converts such OFDM signal into the signal  $Y(l, k)$  in the frequency axis direction. A data extracting unit extracts a data signal  $Y(l, kd)$  and a pilot extracting unit extracts a pilot signal  $Y(l, kp)$ . A complex dividing unit divides the extracted pilot signal with a pilot signal  $X(l, kp)$  having the identical amplitude and phase as that in the transmitting side. An interpolating unit performs a linear interpolation by using a transmission path response  $H(l, kp)$  of the pilot signal in order to calculate the transmission path estimation value  $H'(l, k)$  of the data signal. A complex dividing unit divides the extracted data signal with the transmission path estimation value of the data signal in order to calculate the data signal  $Y'(l, kd)$  that is compensated in the amplitude and phase.

TOP SECRET//COMINT